

REMARKS

Reconsideration and allowance of the claims as amended is respectfully requested.

Claims 1-7 are pending. Claim 7 has been added to cover a more specific product. Claims 2-6 are withdrawn from consideration by the Examiner as drawn to a non-elected invention pursuant to 37 CFR 1.142(b).

Claim 1 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. Applicants respectfully traverse.

Claim 1 has been amended to recite the range of ratio values for $\frac{DMP}{CTAB} = 1.2\text{-}3.5$. The basis for the 3.5 value is found in Example 1 as filed. The 3.5 value is an inherent characteristic of the product prepared according to Example 1.

Further, "(V₂=...consumption)" has been amended to correct an obvious error. With regard to the intended meanings for V₁ and V₂, the ratio of these values are empirically determined using Hg porosimetry according to the DIN 66 133 measurement method. See the specification at line 30 on page 2. The claim now employs both V₁ and V₂ consistently in this fashion.

In light of the changes to claim 1 and the comments provided above, withdrawal of the rejection is respectfully requested.

Claim 1 is rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103 as obvious over Lagarde et al. Applicants respectfully traverse this rejection.

The claims as amended are clearly drawn to a precipitated silica acid which is characterized by two parameters $V_2:V_1$, determined with the mercury molding method and by the ratio of DBP:CTAB. These parameters along with the other listed parameters identify a precipitated silica acid suitable for use in the manufacture of tires. See page 7 at lines 23-26 where the silicic acid of the invention is used in natural rubber mixtures for the manufacture of tires. The tires made from rubber mixture containing the precipitated silica of the invention exhibit considerably improved properties such as, e.g., a higher modulus, a lower roll resistance and a better wear resistance. These advantages and others are found on page 10, lines 16-23 of this application.

In contrast, Lagarde et al. are concerned with the development of a precipitated silica as a filler material for reinforcement of organosilicic polymers. The silica product has a specified composition (see tables in col. 2) and is prepared in a specified fashion which permits blocking of any micropores (see col. 5, lines 1-12). The resulting product is not used to manufacture tires but rather is added to silicone rubber to form mixtures which are vulcanized. The end product specifically

mentioned by Lagarde et al. is crepe rubber-soled shoes. See col.14, l. 27. This silicone rubber product on its face does not appear to meet the requirements of automobile tires in regards to wear resistance, mechanical strength and tear resistance.

Further, Lagarde et al. describes a precipitation silicic acid which is characterized in column 2, lines 1-34 in terms of physicochemical data. Among other the listed properties, the silicic acid of Lagarde et al. is characterized has having a sodium content which must be less than 500 ppm. The low sodium content of the precipitation silicic acid is necessary for their product. See Example 2. It can be gathered from column 2, lines 6-14 in Lagarde et al. that the precipitation silicic acid with the low sodium content of <500 has the same reinforcing action as a pyrogenically produced silicic acid.

In light of these enumerated differences, the product of Lagarde et al. is clearly different from that claimed. Further, since the product of Lagarde et al. is utilized for a different purpose, it is not clear what guidance and motivation exists within the reference to motivate one of ordinary skill in the art to make the necessary changes to arrive at the product as now claimed.

Accordingly, in light of the amendments to claim 1, the more limited nature of new claim 7 and the arguments, supra, withdrawal of this rejection is respectfully requested.

ESCH et al. -- Appln. No.: 08/319,490

Having addressed all the outstanding rejections, allowance of the claims is deemed in order and a Notice to that effect is respectfully requested.

Respectfully submitted

CUSHMAN, DARBY & CUSHMAN

By


Thomas G. Wiseman

Reg. No. 35,046

Tel. No.: (202) 861-3077

Fax No.: (202) 822-0944

TGW/mjk

1100 New York, Avenue, N.W.
Ninth Floor
Washington, D.C. 20005-3918
(202) 861-3000